

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Kazuyuki OHHASHI	Confirmation No.:	8111
Appln. No.	: 09/988,208	Examiner:	F.N. Aghdam
Filed	: November 19, 2001	Group Art Unit:	2611
For	: PHASE OFFSET CALCULATION METHOD AND PHASE OFFSET CIRCUIT		

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AF
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the Final Office Action of April 29, 2009, in which a three-month shortened statutory period for response was set to expire on July 29, 2009, and to the Advisory Action dated August 5, 2009, Applicant requests a Pre-Appeal Brief Panel to review and withdraw the remaining rejection set forth in the Final Office Action.

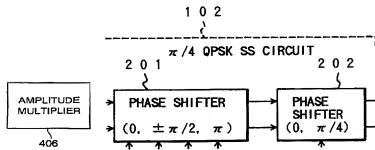
REMARKS

In the outstanding Final Office Action, claim 32 was rejected under 35 U.S.C. §101, as being directed to non-statutory subject matter. Claims 25-35 were rejected under 35 U.S.C. §103(a) over SATO (U.S. Patent No. 5,956,328), in view of Applicant's disclosed prior art. Claim 32 was subsequently cancelled without prejudice to or disclaimer of the subject matter recited therein in a Response Under 37 C.F.R. §1.116 filed on July 20, 2009. Accordingly, the only remaining rejection to be reviewed by the Pre-Appeal Brief Panel is the rejection of claims 25-31 and 33-35 under 35 U.S.C. §103(a) over SATO in view of Applicant's disclosed prior art.

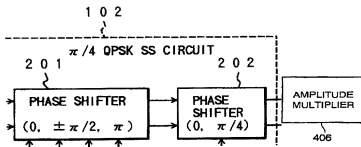
The Final Office Action suggested that Applicant has misinterpreted the Examiner's proposed combination of SATO and Applicant's disclosed prior art. However, the Examiner has not provided any interpretation of how SATO and Applicant's disclosed prior art would be combined such that Applicant's claims would result. Accordingly, Applicant's previously-

provided interpretations of the proposed combination of SATO and Applicant's disclosed prior art are the only interpretations so far in the record. The only evidence in the record of the result of combining SATO and Applicant's disclosed prior art has been provided by Applicant, as follows:

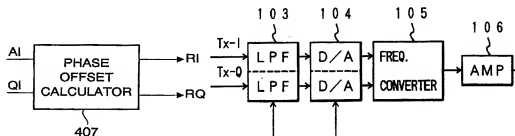
First:



Second:



Third:



None of the combinations/modifications shown above would result in Applicant's claimed invention. Additionally, at no time has any rejection of Applicant's claims over SATO

and Applicant's disclosed prior art shown how any such combination would result in Applicant's claimed invention. Accordingly, the rejection of Applicant's claims over ATO and Applicant's disclosed prior art is improper, and should be withdrawn.

That is, phase shifters 201 and 202 of QPSK spreading circuit 102 in SATO (see Figures 1 and 2) are directed only to features of phase control, and not to amplitude adjustment. Therefore, QPSK spreading circuit 102 is analogous to phase offset calculator 407 in Applicant's disclosed prior art. However, interchanging QPSK spreading circuit 102 with phase offset calculator 407 in Applicant's disclosed prior art in any way would not result in Applicant's claimed invention.

As an explanation of the first possible combination shown above, a modification of QPSK spreading circuit 102 in SATO with Applicant's disclosed prior art would involve no more than replacing QPSK spreading circuit 102 for phase offset calculator 407. This is shown in the first combined figure above. Alternatively, a modification of phase offset calculator 407 with SATO would involve no more than replacing phase offset calculator 407 for QPSK spreading circuit 102. For sake of brevity, this alternative is not shown. Nevertheless, neither of these combinations of SATO and Applicant's disclosed prior art would result in Applicant's claimed invention. Simply put, amplitude multiplication does not take place in SATO or Applicant's disclosed prior art between stages of phase shifting.

As an explanation of a second possible combination, phase offset calculator 407 in Applicant's disclosed prior art could be replaced with QPSK spreading circuit 102 from SATO, and QPSK spreading circuit 102 in SATO then placed in front of amplitude multiplier 406 rather than behind. This is shown in the second combined figure above. However, this configuration also would not result in Applicant's claimed invention. Figure 1 of SATO already shows power amplifier 106 after the QPSK spreading circuit 102, so power amplifier 106 in SATO would not be replaced with amplitude multiplier 406. Nevertheless, even such a combination of SATO and Applicant's disclosed prior art would not result in Applicant's claimed invention. Again, amplitude multiplication does not take place in SATO or Applicant's disclosed prior art between stages of phase shifting.

As an explanation of a third possible combination, phase offset calculator 407 in Applicant's disclosed prior art might replace QPSK spreading circuit 102 in SATO, but this

would also not result in the combination recited in Applicant's claims. This is shown in the third combined figure above. However, such combination also does not result in Applicant's claimed invention.

That is, any simple modification of SATO with teachings of Applicant's disclosed prior art would simply replace an amplitude adjuster 106 in SATO with amplitude multiplier 406 in Applicant's disclosed prior art, or QPSK spreading circuit 102 of SATO with phase offset calculator 407 in Applicant's disclosed prior art. However, any such replacements/modifications would not result in the combination recited in Applicant's pending claims. Therefore, no combination of SATO and Applicant's disclosed prior art would result in the combination of Applicant's claims. As set forth above, no such combination of SATO and Applicant's disclosed prior art results in Applicant's claimed invention, and the rejection of Applicant's claims on this ground should therefore be withdrawn.

Applicant has also explained previously in exhaustive detail that the invention to which Applicant's claims are directed requires fewer (i.e., a single) $\sqrt{2}$ calculation in comparison to analogous prior art such as Applicant's disclosed prior art. For the sake of brevity, the details of these benefits are not repeated here, but can be reviewed in Applicant's immediately previous submissions. As graphically shown in Applicant's previous Response Under 37 C.F.R. §1.116, simply switching on and off between offset processing in 90° units by changing the signs of symbol points in Sign Inverter 60 and offset processing in 45° units in 45° Phase Shifters requires only one $\sqrt{2}$ calculation, whereas the Prior Art offset processing requires multiple such $\sqrt{2}$ calculations. The prior art was shown to require multiple $\sqrt{2}$ calculations and associated processing, whereas the claimed invention according to Figure 4A and detailed in Figure 7 of Applicant's specification requires only a single such $\sqrt{2}$ calculation. SATO as modified by Applicant's disclosed prior art would not result in Applicant's claimed invention, and would not result in these benefits of reducing calculation processing.

As set forth above, SATO as modified by Applicant's disclosed prior art does not result in Applicant's claimed invention, and does not result in the benefits of Applicant's claims as set forth above. SATO and Applicant's disclosed prior art do not invite any modification in any manner such that the invention recited in Applicant's claims would be obtained. Such modification is not merely a matter of design choice, and should not be arbitrarily dismissed in

the manner of the Examiner's rejection of claims which is not supported by teachings of SATO or Applicant's disclosed prior art.

Moreover, each of independent claim 28 and independent claim 33 recite features of controlling the second phase offsetting based on a signal from a remote source (in claim 28 "a message included in a reception signal from a receiver that receives communication signals" from the claimed CDMA transmission apparatus). There is no feature of SATO or Applicant's disclosed prior art that discloses controlling the second phase offsetting based on a signal from a remote source. At no time has the Examiner established that any combination of SATO and Applicant's disclosed prior art would result in such features. Accordingly, the rejection of claims 28 and 33 is improper and should be withdrawn for these additional reasons.

At least for these reasons, SATO in view of Applicant's disclosed prior art do not render obvious independent claims 25, 26, 28 and 33. Therefore, the rejection of claims 25, 26, 28 and 33 under 35 U.S.C. §103 is improper, at least for each of the reasons set forth above. Accordingly, each of the independent claims now pending is allowable over SATO and/or Applicant's disclosed prior art, whether considered alone or in any proper combination. Further, each of the pending dependent claims is allowable at least for depending, directly or indirectly, from an allowable independent claim, as well as for additional reasons related to their own recitations. Accordingly, reconsideration and withdrawal of the outstanding rejection is requested.

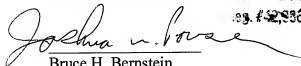
If there should be any questions about this application, any representative of the U.S. Patent and Trademark Office is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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August 25, 2009
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